

(b) All steam piping subject to pressure from the main boiler should be subjected to a hydrostatic test at a pressure of $1\frac{1}{4}$ times the maximum allowable working pressure of the boiler after every five years of service except as otherwise provided for in paragraph (a) of this section. Unless the covering of the piping is removed, the test pressure must be maintained on the piping for ten minutes. If any evidence of moisture or leakage is detected, the covering should be removed and the piping thoroughly examined. No piping with a nominal size of 3 inches or less need be hydrostatically tested.

(c) The setting of safety and relief valves installed in piping systems shall be checked by the marine inspector at each inspection for certification for vessels whose Certificates of Inspection are renewed each year. For other vessels, the setting must be checked twice within any 5-year period, and no more than 3 years may elapse between any check and its immediate predecessor.

[CGFR 68-82, 33 FR 18890, Dec. 18, 1968, as amended by CGD 73-248, 39 FR 30839, Aug. 26, 1974; CGD 83-043, 60 FR 24782, May 10, 1995; USCG-1999-4976, 65 FR 6500, Feb. 9, 2000]

§ 61.15-10 Liquefied-petroleum-gas piping for heating and cooking.

(a) Leak tests as described in paragraph (b) of this section shall be conducted at least once each month, at each inspection for certification, and at each periodic inspection. The tests required at monthly intervals shall be conducted by an appropriately credentialed officer of the vessel or qualified personnel acceptable to the Officer in Charge, Marine Inspection. The owner, master, or person in charge of the vessel shall keep records of such tests showing the dates when performed and the name(s) of the person(s) and/or company conducting the tests. Such records shall be made available to the marine inspector upon request and shall be kept for the period of validity of the vessel's current certificate of inspection. Where practicable, these records should be kept in or with the vessel's logbook.

(b) Test the system for leakage in accordance with the following procedure: With the appliance valve closed, the master shutoff valve on the appliance

open, and one cylinder valve open, note pressure in gauge.

[CGFR 68-82, 33 FR 18890, Dec. 18, 1968, as amended by USCG-1999-4976, 65 FR 6500, Feb. 9, 2000; USCG-2003-16630, 73 FR 65189, Oct. 31, 2008; USCG-2006-24371, 74 FR 11265, Mar. 16, 2009]

§ 61.15-12 Nonmetallic expansion joints.

(a) Nonmetallic expansion joints must be examined externally at each inspection for certification and periodic inspection for signs of excessive wear, fatigue, deterioration, physical damage, misalignment, improper flange-to-flange spacing, and leakage. A complete internal examination must be conducted when an external examination reveals excessive wear or other signs of deterioration or damage.

(b) A nonmetallic expansion joint must be replaced 10 years after it has been placed into service if it is located in a system which penetrates the side of the vessel and both the penetration and the nonmetallic expansion joint are located below the deepest load waterline. The Officer in Charge, Marine Inspection may grant an extension of the ten year replacement to coincide with the vessel's next drydocking.

[CGD 77-140, 54 FR 40615, Oct. 2, 1989, as amended by CGD 95-028, 62 FR 51202, Sept. 30, 1997; USCG-1999-4976, 65 FR 6501, Feb. 9, 2000]

§ 61.15-15 Other piping.

(a) All other piping systems shall be examined under working conditions as required by the marine inspector.

Subpart 61.20—Periodic Tests of Machinery and Equipment

§ 61.20-1 Steering gear.

(a) The marine inspector must inspect the steering gear at each inspection for certification for vessels whose Certificate of Inspections are renewed each year. For other vessels, the marine inspector must inspect the steering gear twice within a 5-year period, and no more than 3 years may elapse between any inspection and its immediate predecessor. The marine inspector may inspect the steering gear more often, if necessary.

§ 61.20-3

(b) All devices employed in the change-over from automatic to manual operation shall be examined and tested.

[CGFR 68-82, 33 FR 18890, Dec. 18, 1968, as amended by USCG-1999-4976, 65 FR 6501, Feb. 9, 2000]

§ 61.20-3 Main and auxiliary machinery and associated equipment, including fluid control systems.

(a) At each inspection for certification and periodic inspection the marine inspector shall conduct such tests and inspections of the main propulsion and auxiliary machinery and of its associated equipment, including the fluid control systems, as he feels necessary to check safe operation.

(b) Remote control for the means of stopping machinery driving forced and induced draft fans, fuel oil transfer pumps, fuel oil unit pumps, and fans in the ventilation systems serving machinery and cargo spaces shall be tested at each regular inspection for certification and periodic inspection.

[CGFR 68-82, 33 FR 18890, Dec. 18, 1968, as amended by USCG-1999-4976, 65 FR 6501, Feb. 9, 2000]

§ 61.20-5 Drydock examination.

(a) When any vessel is drydocked, examination shall be made of the propeller, stern bushing, sea connection, and fastenings if deemed necessary by the marine inspector.

(b) Sea chests, sea valves, sea strainers, and valves for the emergency bilge suction shall be opened up for examination every 5 years at the time of drydocking.

[CGFR 68-82, 33 FR 18890, Dec. 18, 1968, as amended by CGD 84-024, 53 FR 32231, Aug. 24, 1988; CGD 95-028, 62 FR 51202, Sept. 30, 1997]

§ 61.20-15 Tailshaft examination.

The rules in §§ 61.20-15 through 61.20-23 apply only to vessels in ocean and coastwise service. Each examination, inspection and test prescribed by these sections must be conducted in the presence of a marine inspector.

[CGD 78-153, 45 FR 52388, Aug. 7, 1980]

§ 61.20-17 Examination intervals.

(a) A lubricant that demonstrates the corrosion inhibiting properties of oil when tested in accordance with ASTM

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D 665 (incorporated by reference, see § 61.03-1) is considered to be equivalent to oil for the purposes of the tailshaft examination interval.

(b) Except as provided in paragraphs (c) through (f) of this section, each tailshaft on a vessel must be examined twice within any 5 year period. No more than 3 years may elapse between any 2 tailshaft examinations.

(c) Tailshafts on vessels fitted with multiple shafts must be examined once every 5 years.

(d) Tailshafts with inaccessible portions fabricated of materials resistant to corrosion by sea water, or fitted with a continuous liner or a sealing gland which prevents sea water from contacting the shaft, must be examined once every 5 years if they are constructed or fitted with a taper, keyway, and propeller designed in accordance with the American Bureau of Shipping standards to reduce stress concentrations or are fitted with a flanged propeller. Accessible portions of tailshafts must be examined visually during each drydock examination.

(e) Tailshafts with oil lubricated bearings, including bearings lubricated with a substance considered to be equivalent to oil under the provisions of paragraph (a) of this section need not be drawn for examination—

(1) If tailshaft bearing clearance readings are taken whenever the vessel undergoes a drydock examination or underwater survey;

(2) If the inboard seal assemblies are examined whenever the vessel undergoes a drydock examination or underwater survey;

(3) If an analysis of the tailshaft bearing lubricant is performed semi-annually in accordance with the lubrication system manufacturer's recommendations to determine bearing material content or the presence of other contaminants; and

(4) If—

(i) For tailshafts with a taper, the propeller is removed and the taper and the keyway (if fitted) are nondestructively tested at intervals not to exceed 5 years; or

(ii) For tailshafts with a propeller fitted to the shaft by means of a coupling flange, the propeller coupling